



~~#5~~
PATENT
Atty. Docket No.
CIBT-P01-114

TECH CENTER 1600/2900

SEP 13 2001

1614
RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Burkly et al.

Serial No.: 09/804,490

Group Art Unit: 1614

Filed: March 12, 2001

Examiner: To be assigned

Title: HEDGEHOG AND PATCHED ANTAGONISTS
FOR INHIBITING CELL AND TISSUE GROWTH
AND DIFFERENTIATION AND USES THEREFOR

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents,
United States Patent and Trademark Office, Washington, D.C. 20231.

9/7/01
Date of Signature
and of Mail Deposit

Karen DiRocco
Karen DiRocco

Assistant Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(b)

Submitted herewith on Form PTO-1449 is a list of documents known to Applicants, their Agent and/or Attorney in compliance with the requirements of 37 C.F.R. 1.56. A copy of each document listed is also being submitted herewith.

This Information Disclosure Statement is being filed before the mailing of the first office action on the merits; therefore, no fee is due.

CIBT-P01-114
09/804,490


Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form PTO-1449.

This submission does not represent that a search has been made or that no better art exists. Nor does it constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there are any fees due in connection with the filing of this Statement, please charge the fees to our **Deposit Account, No. 18-1945**.

Respectfully submitted,
Ropes & Gray

By: 
David Halstead, Ph.D.
Reg. 44,735
Agent for Applicants

Dated: 9/2/01
Customer No. 28120
Ropes & Gray
One International Place
Boston, MA 02110-2624
Voice: (617) 951-7000
Facsimile: (617) 951-7050

Form PTO-1449

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**
(Use several sheets if necessary)
Docket Number (Optional)
CIBT-P01-114Application Number
09/804,490

Burkly et al.

March 12, 2001

1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILED DATE IF APPROPRIATE
	5,789,650	8/4/98	Lonberg et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	AB	WO 95/23223	8/31/95	PCT			

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages Etc.)

AC	Alcedo et al., 1996, "The Drosophila smoothened gene encodes a seven-pass membrane protein, a putative receptor for the hedgehog signal", Cell 86:221-232
AD	Alexandre et al., 1996, "Transcriptional activation of hedgehog target genes in Drosophila is mediated directly by the cubitus interruptus protein, a member of the GLI family of zinc finger DNA-binding proteins", Genes & Dev. 10:2003-2013
AE	Boerner et al., 1991, "Production of antigen-specific human monoclonal antibodies from in vitro-primed human splenocytes", J. Immunol. 147:86-95
AF	Bumcrot et al., 1995, "Proteolytic processing yields two secreted forms of sonic hedgehog", Mol. Cell. Biol. 15:2294-2303
AG	Chang et al., 1994, "Products, genetic linkage and limb patterning activity of a murine hedgehog gene", Development 120:3339-3353
AH	Co et al., 1991, "Humanized antibodies for antiviral therapy", Proc. Natl. Acad. Sci. USA 88:2869-2873
AI	Dahmane et al., 1997, "Activation of the transcription factor Gli1 and the Sonic hedgehog signalling pathway in skin tumours", Nature 389:876-880
AJ	Dominguez et al., 1996, "Sending and receiving the hedgehog signal: control by the Drosophila Gli protein Cubitus interruptus", Science 272:1621-1625
AK	Echelard et al., 1993, "Sonic hedgehog, a member of a family of putative signaling molecules, is implicated in the regulation of CNS polarity", Cell 75:1417-1430
AL	Ekker et al., 1995, "Patterning activities of vertebrate hedgehog proteins in the developing eye and brain", Curr. Biol. 5:944-955
AM	Ericson et al., 1996, "Two critical periods of sonic hedgehog signaling required for the specification of motor identity", Cell 87:661-673
AN	Fan et al., 1995, "Long-range sclerotome induction by sonic hedgehog: direct role of the amino-terminal cleavage product and modulation by the cyclic AMP signaling pathway", Cell 81:457-465

Form PTO-1449

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**

(Use several sheets if necessary)

Docket Number (Optional)

CIBT-P01-114

Application Number

09/804,490

Burkly et al.

March 12, 2001

1614

AO	Hall et al., 1995, "A potential catalytic site revealed by the 1.7-A crystal structure of the amino-terminal signaling domain of Sonic hedgehog", Nature 378:212-216
AP	Huang and Stollar, 1991, "Construction of representative immunoglobulin variable region cDNA libraries from human peripheral blood lymphocytes without in vitro stimulation", J. Immunol. Meth. 141:227-236
AQ	Johnson and Tabin, 1995, "The long and short of hedgehog signaling", Cell 81:313-316
AR	Jones et al., 1986, "Replacing the complementarity-determining regions in a human antibody with those from a mouse", Nature 321:522-525
AS	Kohler et al., 1975, "Continuous cultures of fused cells secreting antibody of predefined specificity", Nature 256:495-497
AT	Lee et al., 1994, "Autoproteolysis in hedgehog protein biogenesis", Science 266:1528-1536
AU	Marigo et al., 1996, "Biochemical evidence that patched is the Hedgehog receptor", Nature 384:176-179
AV	Needleman et al., 1970, "A general method applicable to the search for similarities in the amino acid sequence of two proteins", J. Mol. Biol. 48:443-453
AW	Orlandi et al., 1989, "Cloning immunoglobulin variable domains for expression by the polymerase chain reaction", Proc. Natl. Acad. Sci. USA 86:3833-3837
AX	Parisi et al., 1998, "The role of the hedgehog/patched signaling pathway in epithelial stem cell proliferation: from fly to human", Cell Res. 8:15-21
AY	Persson et al., 1991, "Generation of diverse high-affinity human monoclonal antibodies by repertoire cloning", Proc. Natl. Acad. Sci. USA 88:2432-2436
AZ	Porter et al., 1995, "Hedgehog patterning activity: role of a lipophilic modification mediated by the carboxy-terminal autoprocessing domain", Cell 86:21-34
BA	Porter et al., 1995, "The product of hedgehog autoproteolytic cleavage active in local and long-range signalling", Nature 374:363-366
BB	Porter et al., 1996, "Cholesterol modification of hedgehog signaling proteins in animal development", Science 274:255-258
BC	Queen et al., 1989, "A humanized antibody that binds to the interleukin 2 receptor", Proc. Natl. Acad. Sci. USA 86:10029-10033
BD	Riechmann et al. 1988, "Reshaping human antibodies for therapy", Nature 332:323-327
BE	St. Jacques et al., 1998, "Sonic hedgehog signaling is essential for hair development", Curr. Biol. 8:1058-1068


 TECH CENTER 1600-2900
 SEP 3 2001

 RECEIVED
 SEP 3 2001

Form PTO-1449

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**

(Use several sheets if necessary)

Docket Number (Optional)

CIBT-P01-114

Application Number

09/804,490

Burkly et al.

March 12, 2001

1614

BF

Stone et al., 1996, "The tumour-suppressor gene patched encodes a candidate receptor for Sonic hedgehog", *Nature* 384:129-134

BG

Schwartz and Dayhoff, 1978, "Matrices for detecting distant relationships", *Atlas of Protein Sequence and Structure* 5:Suppl. 3 pp 353-358 (Nat. Biomed. Res. Foundation, Washington, D.C.)

BH

Sultan et al., 1997, "Blockade of CD2-LFA-3 interactions protects human skin allografts in immunodeficient mouse/human chimeras", *Nat. Biotechnol.* 15:759-762

BI

Tempest et al., 1991, "Reshaping a human monoclonal antibody to inhibit human respiratory syncytial virus infection in vivo", *Biotechnol.* 9:266-271

BJ

Therond et al., 1996, "Phosphorylation of the fused protein kinase in response to signaling from hedgehog", *Proc. Natl. Acad. Sci. USA* 93:4224-4228

BK

Verhoeven et al., 1988, "Reshaping human antibodies: grafting an antilysozyme activity", *Science* 239:1534-1536

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE